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Subject: NY Times: Schools Nationwide Still Grapple With Lead in Water

This is an updated and complete version of the NY Times article into today's clips.

Schools Nationwide Still Grapple With Lead in Water

By MICHAEL WINES, PATRICK McGEEHAN and JOHN SCHWARTZ, MARCH 26, 2016



Nicolaus Copernicus Elementary, a 98-year-old school building in Jersey City, N.J., where 16 of 19 water fountains and coolers were found to have lead levels higher than permissible. Credit Kirsten Luce for The New York Times

JERSEY CITY — Anxious parents may wonder how a major school system like Newark's could overlook lead in the drinking water of 30 schools and 17,000 students. The answer: It was easy. They had to look only a few miles away, at the century-old classrooms of the schools here, across the Hackensack River.

The <u>Jersey City Public Schools</u> district discovered lead contamination in eight schools' drinking fountains in 2006, and in more schools in 2008, 2010 and 2012. But not until 2013 did officials finally chart a comprehensive attack on lead, which by then had struck all but six schools.

This winter's <u>crisis in Flint, Mich.</u>, has cast new attention on lead in water supplies. But problems with lead in school water supplies have dragged on for years — aggravated by ancient buildings and plumbing, prolonged by official neglect and tight budgets, and enabled by a gaping loophole in federal rules that largely exempts schools from responsibility for the purity of their water.

Children are at greatest risk from lead exposure, and school is where they spend much of their early lives. But cash-starved school administrators may see a choice between spending money on teachers or on plumbing as no choice at all.

"They feel it's almost better not to sample, because you're better off not knowing," <u>Marc Edwards</u>, a Virginia Tech civil engineering professor who has fought for lead safety nationwide, said in an interview.

The problem is persistent and widespread. Baltimore's public schools switched entirely to bottled water in 2007 because ripping out the lead plumbing would have been impractical. Sebring, Ohio, found <u>elevated lead levels</u> in August after workers had stopped adding an anti-corrosion chemical to the water supply.

The <u>Los Angeles Unified School District</u> allotted \$19.8 million in September to retrofit or remove its 48,000 drinking fountains to erase a small but tenacious lead threat. Ithaca, N.Y., schools switched temporarily to bottled water in January after water tests found elevated lead levels at two schools.

Congress could easily have cracked down on lead in schools. In fact, it once did. The 1988 Lead Contamination Control Act required schools to scrap lead-lined water coolers, test drinking water and remedy any contamination they found. But a federal appeals court struck down part of the law affecting schools in 1996. And while some states have devised their own lead-testing rules, federal lawmakers have yet to revisit the issue.

Photo



Aqua Pro-Tech Laboratories, a New Jersey environmental testing laboratory, began testing water in Newark schools this month. Students at 30 schools were switched to bottled water. Credit Richard Perry/The New York Times

The only regulation left is a 1991 rule by the federal <u>Environmental Protection Agency</u> requiring periodic tests for lead and copper by most public water systems, whether the supplier is a big utility or a well in a trailer park or campground.

But although schools and day care centers are the main sources of water for children on most weekdays, only the few schools that operate their own wells fall under the rule. The vast majority of schools use treated water from utilities.

And while the utilities test their water, virtually all lead contamination occurs inside schools — in lead pipes, water-cooler coils and linings, and in leaded-metal fountains and taps.

"If you're a mom-and-pop coffee shop in Sparta, New Jersey, and have a private well, you're required to certify every quarter," said Robert Barrett, the chief executive of Aqua Pro-Tech Laboratories, a New Jersey environmental testing laboratory. "But if you're a school, you don't have to do anything."

Mr. Barrett, whose firm tests water in 13 states, said the Newark and Flint revelations prompted reassessments by schools and other institutions that had not scrutinized their plumbing in years, if ever.

"No one was testing," he said. "Now all of a sudden they're all going crazy."

In Newark, where school officials disclosed <u>elevated lead levels</u> earlier this month, Mr. Barrett's firm began testing water systemwide on March 19. Students at the 30 schools now drink bottled water, and the youngest students were <u>offered free</u> blood tests.

There, as in Los Angeles, high lead levels persisted even though workers flush the water pipes every weekday to push out lead that accumulates overnight. Nor did some filters on Newark school fountains reduce contamination sufficiently.

The <u>Centers for Disease Control and Prevention says</u> children whose blood lead content exceeds five micrograms per deciliter — 50 parts per billion, or less than a millionth of an ounce in a pint — should see a doctor. High <u>blood lead levels</u> can stunt a child's mental development and damage a range of organs. But even smaller amounts can affect children's intellectual development, and the agency says no level of lead is safe.

Photo



Cases of bottled water at Sebring McKinley Junior Senior High School in Ohio, where elevated levels of lead were found in August after workers had stopped adding an anti-corrosion chemical to the water supply. Credit Ty Wright for The New York Times

The E.P.A.'s 1991 lead rule — the one that requires most public water systems to periodically test for lead and copper — limits the amount of lead in drinking water to no more than 15 parts per billion. The rule is being revised, though, and that limit could soon be lowered. Even though the rule does not apply to most schools, districts that do monitor drinking water generally use it as a guideline.

Tainted water is not the biggest source of lead exposure in humans; on average, the E.P.A. says, it makes up about a fifth of contamination. Pregnant women working in schools are at greatest risk because fetuses are most profoundly affected by contamination. Women face an increased risk of <u>miscarriage</u>, along with potential organ damage and developmental problems in the baby.

Schools built before 1986, when an <u>amendment to the Safe Drinking Water Act</u> banned lead plumbing, pose the greatest hazard. Fountains may be fed water through lead pipes commonly used in the early 20th century. Older water coolers may have lead linings and components.

But even newer buildings can face a threat. Under industry pressure, Congress defined "lead-free" in the amendment as no more than 8 percent lead. Plumbing hardware like faucets and connectors often contained that much lead until 2013, when the permissible level fell to near zero.

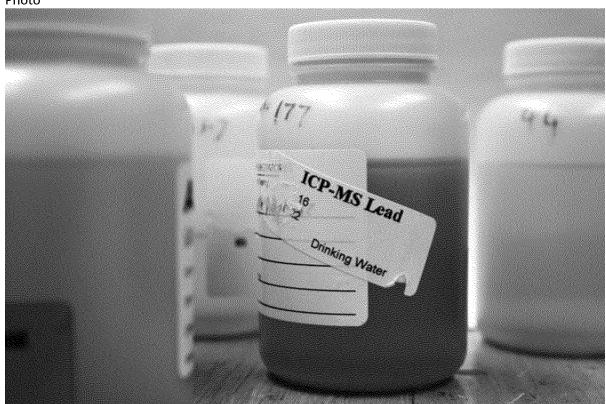
Los Angeles school officials learned of the 8-percent rule the hard way. In the 131 schools built over the last decade, the district installed thousands of water fountains with long-lasting brass fittings to reduce maintenance costs. They later discovered that the leaded brass fittings tainted the water in some fountains beyond the E.P.A.'s lead standard.

The district's \$19.8 million lead initiative seeks, in part, to correct that. "The approach we're taking now is to get rid of anything with a brass fitting," Roger Finstad, the district's maintenance and operations director, said.

In New York City, officials have uprooted and replaced all lead pipes leading from water mains into schools, swiftly replaced equipment when tests showed high lead levels, and ordered weekly pipe flushing at any school with a violation. All schools' water is regularly tested. The result? Only 1.3 percent of nearly 90,000 water tests have exceeded the city's lead threshold. The program is "a model for the nation," said Dr. Philip Landrigan, an expert on lead and a professor of preventive medicine and pediatrics at the Icahn School of Medicine at Mount Sinai.

That scorched-earth approach is the surest way to control lead threats, but few school systems have the money or knowledge to pursue it. Many instead follow a whack-a-mole strategy, testing a sample of water sources, then fixing or disabling ones with excessive lead concentrations.

Photo



A water sample taken from a New Jersey school by Aqua Pro-Tech Laboratories. Aqua's chief executive, Robert Barrett, said that before the revelations in Newark and Flint, Mich., "no one was testing. Now all of a sudden, they're all going crazy." Credit Richard Perry/The New York Times

That can be ineffective, because the levels at any fountain or tap can swing wildly as residue breaks loose in lead plumbing. Dr. Edwards, the Virginia Tech specialist, recalled testing a single tap 10 times. Eight tests judged the water perfectly safe. The other two showed "astronomical amounts of lead," he said, "like eating five to 10 paint chips."

"This is like Russian roulette," he said.

So it was in Newark, where the E.P.A. sampled water in 2003 as part of an outreach program on lead, and found contamination in three schools. The district began replacing school water fountains and installing filters on violating water sources, but never got ahead of the problem. From 2012 through 2015, nearly one in eight water samples exceeded the E.P.A.'s 15 parts-per-billion threshold.

"Did we know we had a problem? Yes," said Marion A. Bolden, Newark's superintendent early last decade. "Did we think we had adequately remediated the problem? Yes."

Here in Jersey City, the public schools are classic candidates for a lead problem. Two-thirds are over 80 years old, and a third more than a century old. The system had been under state control since 1989 because of poor management and low test scores; only recently, with Marcia Lyles as the superintendent, did the state agree to return control to local officials.

Jersey City taps and fountains went untested until the E.P.A. took samples in 2006, again part of the federal outreach program, and turned up lead concentrations up to 60 times the federal threshold at eight schools. Not until early 2008, after more tests found fresh contamination at six of the schools, did the superintendent at the time, Charles T. Epps Jr., switch those students to bottled water.

Jersey City's mayor then, Jerramiah Healy, declared the matter closed. "We believe this is a situation that is isolated to the affected schools and to certain water fountains within those schools," The Jersey Journal newspaper quoted him as saying.

Mr. Healy was wrong. The district tested all its fountains and taps in mid-2008 and found that water in 27 more schools was as much as 80 times higher than the E.P.A.'s lead threshold. Under pressure from advocates, the district tested selected water sources at 38 buildings in 2010 and found yet more lead. In a 98-year-old school, <u>Nicolaus Copernicus</u> Elementary, 16 of 19 water fountains and coolers were found above permissible levels.

That school and some others were switched to bottled water, and fountains and taps were turned off. But that was not the end.

A 2013 retest of all 2,000-plus water sources found yet more contamination, including one fountain whose water tested 853 times the accepted maximum. Among those water sources were 10 in prekindergarten classes where daily tooth brushing was part of the regimen.

"Any fountains in this building, they don't even work," the Nicolaus Copernicus principal, Diane Pistilli, said this week. "Parents were concerned, and rightly so."

Michael Wines reported from Jersey City, and Patrick McGeehan and John Schwartz from New York. Kate Taylor contributed reporting from New York, and Tyler Alicea from Ithaca, N.Y. Alain Delaquérière and Doris Burke contributed research.

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